

INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR03/00840

A. CLASSIFICATION OF SUBJECT MATTER IPC7 H04R 1/00, H04R 1/02, H04R 1/34 According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC7 H04R, G10K 9/ - 15/, G01N 29/, A61B 8/		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Korean Patents and applications for inventions since 1975 Korean Utility models and applications for Utility models since 1975		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 4-324797 A (MATSUSHITA ELECTRIC IND CO. LTD.) 13 NOVEMBER 1992 see Abstract.	1
A	JP 8-223695 A (HITACHI CONSTR MACH CO. LTD.) 30 AUGUST 1996 see Abstract.	1
A	US 5305731 A (SIEMENS AKTIENGESELLSHAFT) 26 APRIL 1994 see Abstract.	1
A	US 5365024 A (OLYMPUS OPTICAL CO. LTD.) 15 NOVEMBER 1994 see Abstract.	1
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.		
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>* Special categories of cited documents:</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> </div> <div style="width: 45%;"> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"&" document member of the same patent family</p> </div> </div>		
Date of the actual completion of the international search 19 AUGUST 2003 (19.08.2003)		Date of mailing of the international search report 22 AUGUST 2003 (22.08.2003)
Name and mailing address of the ISA/KR Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea Facsimile No. 82-42-472-7140		Authorized officer MOK, Seung Kyun Telephone No. 82-42-481-5677